POSITION DESCRIPTION *(Please Read Instructions on the Back)*

1. Agency Position No.: NS0053

2. Reason for Submission: ☐ Redescription ☐ Reestablishment ☑ New ☐ Other
Explanation *(Show any positions replaced)*

3. Service: ☐ Hdqtrs ☑ Field

4. Employing Office Location:

5. Duty Station:

6. OPM Certification No.:

7. Fair Labor Standards Act: ☑ Exempt ☐ Nonexempt

8. Financial Statements Required: D
☐ Executive Personnel Financial Disclosure ☑ Employment and Financial Interest

9. Subject to IA Action: ☑ Yes ☐ No

10. Position Status: ☑ Competitive ☐ Excepted *(Specify in Remarks)* ☐ SES (Gen.) ☐ SES (CR)

11. Position Is: ☐ Supervisory ☐ Managerial ☑ Neither

12. Sensitivity: ☑ 1--Non-Sensitive ☐ 2--Noncritical Sensitive ☐ 3--Critical ☐ 4--Special Sensitive

13. Competitive Level Code:

14. Agency Use:

15. Classified/Graded by	Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
a. Office of Personnel Management						
b. Department, Agency or Establishment						
c. Second Level Review	Geologist (CRME) FC: 42 OC: AA	GS	1350	13	twr	1/11/04
d. First Level Review						
e. Recommended by Supervisor or Initiating Office						

16. Organizational Title of Position *(if different from offiical title)*:

17. Name of Employee *(if vacant, specify)*:

18. Department, Agency, or Establishment: Department of the Interior

a. First Subdivision: Bureau of Land Management

b. Second Subdivision: State Office

c. Third Subdivision:

d. Fourth Subdivision:

e. Fifth Subdivision:

19. Employee Review-This is an accurate description of the major duties and responsibilities of my position.
Signature of Employee *(optional)*:

20. **Supervisory Certification.** *I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.*

a. Typed Name and Title of Immediate Supervisor:
Signature: Date:

b. Typed Name and Title of Higher-Level Supervisor or Manager *(optional)*:
Signature: Date:

21. **Classification/Job Grading Certification.** *I certify that this position has been classified/graded as required by Title 5, U.S. Code, in conformance with standards published by the U.S. Office of Personnel Management or, if no published standards apply directly, consistently with the most applicable published standards.*
Typed Name and Title of Official Taking Action: Todd W. Ryan, HR Specialist (Classification)
Signature: Date: 1/11/04

22. Position Classification Standards Used in Classifying/Grading Position:
Job Family Standard for Professional Physical Science Work, GS-1300P, December 1997; Mining Engineering Series, GS-880, February 1967.

Information for Employees. The standards, and information on their application, are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or the U.S. Office of Personnel Management. Information on classification/job grading appeals, and complaints on exemption from FLSA, is available from the personnel office or the U.S. Office of Personnel Management.

23. Position Review	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date
a. Employee *(optional)*										
b. Supervisor										
c. Classifier										

24. Remarks
FPL: GS-13: BUS: _____ The use of this position description requires prior approval by WO300.

25. Description of Major Duties and Responsibilities *(See Attached)*

INTRODUCTION

The position has statewide, interagency, and regional minerals responsibilities functioning as the officially designated state Certified Review Mineral Examiner (CRME). Typically, this position is located in a BLM state office. The CRME responsibilities are based upon law. The authority to manage the locatable minerals program (originates with the General Mining Law of 1872), and directs the Secretary of the Interior to manage the mining claim recordation program, and approve mineral patent, on public lands. The Mineral Materials Act of 1947, also establishes the Secretary's authority to manage mineral materials on public lands. This position is responsible for insuring these federal mineral obligations are fulfilled regardless of federal land administrative agency.

As a condition of employment the incumbent of this position is required to file an annual confidential financial disclosure report.

MAJOR DUTIES

1. Mineral Validity Examination Program (40%)

a. As a Certified Mineral Examiner (CME), independently evaluates mining properties where mineral patent applications have been filed, or where mining claims are in conflict with other uses of public lands.

   As a Certified Review Mineral Examiner (CRME), independently reviews and approves or rejects mining claim validity reports prepared by federal CMEs.

   Provides formal and on-the-job training to CMEs.

b. Serves as the State's mineral patent applications validity examination program manager for public lands administered by BLM, National Park Service (NPS), and U.S. Forest Service (USFS).

c. Negotiates with USFS, NPS, and BLM managers to develop plans and staffing for completing mineral patent application validity examinations on public lands.

d. Serves as a mining claim validity subject matter expert. Interprets mineral case law, develops policies, procedures, guidance, and provides training to BLM, NPS, and USFS employees.

e. Provides technical advice and assistance with problems associated with the mineral validity examinations and patent applications.

f. Leads multi-agency mineral examinations task forces.

g. Serves as an expert witness in administrative hearings and Federal Court cases involving minerals issues on public lands regardless of federal administrative agency. Assists the

Solicitor in preparing and conducting cases in an administrative hearing or federal court proceeding.

2. Locatable and Saleable Minerals Program (60%)

a. Serves as the State technical and programmatic lead for the locatable and saleable minerals programs.

b. Develops technical and programmatic direction (policy and/or procedures), provides training, and insures compliance with established policies, standards, and/or procedures.

c. Develops and maintains close contact with both State and regional Federal agencies and the mineral industry to resolve disputes and improve communication concerning federal minerals policies and authorization.

d. Conducts studies and analyses on complex technical mineral and geologic issues.

e. Conducts studies to establish fair market values for mineral material sites.

f. Provides overall minerals review and input into Bureau planning documents such as Resource Management Plans, Environmental Impact Statements, Environmental Analyses, and other related NPS and USFS documents. Provides technical expertise to the development of supplemental program guidance to field offices and other federal agencies. Provides technical guidance to field offices in the relationship between land use planning and minerals exploration and development.

g. Provides statewide BLM minerals budget direction to the PAWP, AWP, and out year budget plans/performance indications. Coordinates the budget development with other offices and subactivities and monitors units of accomplishments.

h. Provides mineral expertise and advice to BLM mineral adjudicators, public room employees, customers, field offices and other federal agency mineral staff.

FACTORS

Factor 1 - Knowledge Required by the Position

Certified Review Mineral Examiner

Expert and comprehensive knowledge of validity examinations and mineral report writing and review as documented by many years of highly diverse experience, including field examinations in most of the western states involving many types of mineral deposits.

Incumbent must be a BLM Certified Review Mineral Examiner. National certification is required to show the necessary knowledge, experience, skills, and training have been attained in order to conduct, review, and approve complex validity and other technical mineral reports.

Extensive professional knowledge of State and Federal mineral laws, case law, regulations, and policies and the ability to interpret and apply them to unique and complex locatable minerals cases.

Geology

Professional knowledge of geology and mineral resources management principles, policies, and practices sufficient to allow for the design, development and implementation of new initiatives, standards, guidelines, and processes within the mining law administration programs.

Comprehensive knowledge of validity examinations, mineral report preparation and technical review programs, including the scientific literature, engineering technology, appropriate laws, regulations, policies, case law, and operating procedures.

Expert knowledge of how geological and mineral resources programs relate to the resource management programs of the Bureau, the Forest Service and other Federal agencies.

Comprehensive knowledge of the public land laws and the Department of Interior's policies pertaining thereto, including the Federal Land Policy and Management Act, the General Mining Law as amended, the Materials Act, the Mineral Leasing Act and other Federal land and mineral laws, including the law pertaining to the beds of navigable bodies of water for authorizing various land and mineral actions upon the public lands and the regulations, manuals and legal opinions and decisions for implementing these authorities.

Knowledge of the state and Federal water appropriation laws, regulations, case law and policies as they apply to the beneficial use of such resources for the development of mineral resources.

Knowledge of state and Federal environmental laws, including the National Environmental Policy Act of 1969, the Endangered Species Act, cultural resources laws, water quality laws, air quality laws, and other legislation to ensure proper management of the land and mineral resources of the public lands.

Knowledge of financial and economic analysis of mineral resources, including commodity pricing, cost estimating, depreciation, depletion, amortization, income tax, cash flow analysis, time value of money, rate of return analysis, sensitivity analysis and replacement analysis as they apply to the cost estimation and valuation process of land and mineral resources.

Knowledge of the geological sciences (paleontology, geomorphology, hydrology, mineral deposits, earth surface processes, mineralogy, petrology and structural geology) in terms of both the scientific literature and the practical application as a field scientist.

In-depth knowledge of mineral engineering as it relates to the evaluation and appraisal of mineral resources. Comprehensive knowledge of all related disciplines including mining engineering, metallurgical engineering, ore processing technology, milling and ore processing technology and mineral economics.

Factor 2 - Supervisory Controls

All work is performed under the supervision of the DSD/Branch Chief who provides direction on responsibility and guidance on critical issues and policy matters. The supervisor defines overall objectives.

Incumbent after deciding on approach and methodology, independently determines the procedures necessary to plan, schedule, and complete work assignments.

Work is reviewed for accomplishment of objectives and policy compliance by the supervisor.

Factor 3 - Guidelines

Guidelines include laws, regulations, BLM Manual and Minerals Handbook, Departmental Manual, Memoranda of Understanding, cooperative agreements, and precedent-setting good mining practices. Frequently, precedents in interpretation of guidelines are not available and incumbent must use judgment based on experience and his/her resourcefulness to develop solutions to problems. The incumbent's interpretation can result in litigation and subsequent appeal to the Interior Board of Land Appeals; therefore, the incumbent must exercise rational judgment on frequently sensitive issues.

Factor 4 - Complexity

The nature of the work requires mastery of several professions, some of which are unrelated, including geology, mining engineering, metallurgy, mineral economics and environmental and mineral law. In-depth knowledge of these professions is used to solve a variety of highly complex, multi-disciplinary and unconventional problems for which there is no established procedure or approach. These pioneering efforts commonly result in new and improved methods of earth resources management by originating new policies, regulations and technical guidelines. Conventional problems and projects are handled by other field office specialists in order to allow the incumbent to work exclusively on the most difficult problems.

Certified mineral examination work consist of analyzing and synthesizing information from several highly specialized areas, including geology, mining engineering, and mineral case law, to resolve unconventional and complex problems of mining claim validity, mining law administration, and surface management of mining operations on Federal lands. The assignments typically involve novel or unique cases for which there are no legal or regulatory precedents or which require the development of new geologic methods. Often there are several approaches that can be taken, the methods and procedures are not established, and the interpretation of data is inconclusive. Modification of established approaches and development of new methods, techniques, or precedents is frequently required to plan and carry out assignments.

Factor 5 - Scope and Effect

Development or change of regulations, Solicitor opinions and BLM administrative decisions initiated by the incumbent will have substantial effect on the nature and amount of work by government resource managers and have far-reaching economic effects on the mineral industry. This guidance directly affects the economic health and stability of the entire industry. Preparation of new technical standards for mineral reports and the approval of mineral reports directly affect the acquisition of Federally owned land and mineral resources.

Legal and technical advice given to adjudicators, field managers, solicitors and the general public leads to the most efficient resolution of mining law conflicts such as trespasses, multiple use conflicts, contests, protests, etc. This expert advice saves money, time, and leads to enhancement of BLM's reputation.

The review of mineral patent reports prior to transmittal to the Secretary will ultimately determine the disposition of thousands of acres of public lands, or in other words determine whether the lands are patented into private ownership or remain as federal land.

Factor 6 - Personal Contacts

Contacts are with various national, regional, and field office representatives of the Federal government, State agencies, private industry, professional associations, university scientists and recognized authorities in related disciplines. The incumbent may contact or be contacted by the WO, sponsoring companies, other Federal agencies and BLM State and Field Offices, Congressional staffs, Departmental Solicitors, GAO and IG auditors, and other members of the public who desire or hold an interest or use authorization on Federal land. These contacts also include presentations to scientific societies and leading workshops and taskforces.

Factor 7 - Purpose of Contacts

Intra-bureau contacts are for the purpose of obtaining information, coordinating and directing work efforts, assessing the adequacy of activities, discussing proposed plans, providing advice and recommendations, and resolving critical problems relative to the geology and mineral resources programs. Interagency contacts are made to develop general policy, and to provide expert technical capability to solve problems and conflicts involving interagency programs and processes. Internal and external contacts are also for the purpose of persuading or encouraging other specialists within and outside the Bureau to develop new techniques or to pursue a particular line of inquiry, and to assist them in developing practical applications of mineral examination and mineral report review procedures.

Factor 8 - Physical Demands

Although most of the work is in the office, frequent field inspections necessitate hiking or walking in mountainous terrain at all times of the year. Incumbent is required to travel in difficult terrain and extreme climatic conditions by foot, 4-wheel drive vehicles, snow machine or on horseback. Also the incumbent may be required to occasionally ride in fixed-wing aircraft or helicopters.

Factor 9 - Work Environment

Work environment ranges from the office setting to remote field locations. The incumbent will perform his/her duties in all types of terrain and in temperatures ranging from -40 degrees F. to over 100 degrees F. Incumbent may occasionally occupy field station quarters with a minimum of comforts for a period of up to one week. Incumbent will adhere to all safety rules and regulations as prescribed in manuals/supplements or by the designated Safety Officer.

EVALUATION STATEMENT

Recommended Classification	Geologist (CRME), GS-1350-13 Mining Engineer (CRME), GS-880-13
Organizational Location:	Bureau of Land Management, State Office Level
References:	Job Family Standard for Professional Physical Science Work, GS-1300P, December 1997; Mining Engineering Series, GS-880, February 1967

Background:

This position is located at the State Office level with (1) responsibility as a BLM Certified Review Mineral Examiner, (2) responsibility as the program leader responsible for planning, initiating, directing, and executing the minerals program at the state level.

The BLM is responsible for administering the General Mining Law of 1872, which opened public lands to the exploration, and extraction of valuable minerals. Processing a mineral patent application is quite complex. The application is filed with BLM. BLM reviews the application to ensure that the applicant has complied with all the paperwork requirements of the Mining Law. If BLM concludes that the paperwork is complete, the BLM State Director forwards the application, together with evidence of posting, publication, payment of the purchase price, and the First Half-Mineral Entry Final Certificate (FHFC), to the Regional Solicitor's Office which provides legal services for BLM activities in that state. The Regional Solicitor conducts a legal review of the package, and then forwards it to the Solicitor for his concurrence in the issuance of the FHFC. The Solicitor then forwards the package to the BLM Director for concurrence in issuance of the FHFC; he/she, in turn, passes it to the Assistant Secretary of Land and Minerals Management (DOI) for further review and concurrence. With the concurrence of these officials, the Secretary signs the FHFC.

After the Secretary signs the FHFC, the patent application is returned to BLM for verification that the applicant has made a valuable mineral discovery, or, in the case of a millsite, that the applicant is using and occupying five acres or less of non-mineral land for mining or milling purposes. At this point a BLM CME completes a mineral examination of the claim or site and prepares a mineral report. The CME may ask for additional documentation from the applicant if the initial proof of discovery does not provide enough data to make a determination. If the mineral report verifies the discovery "of a valuable mineral deposit" (or, in the case of a millsite, that the land is non-mineral), and BLM believes that all other statutory requirements have been met, BLM recommends that the Secretary sign the Second Half-Mineral Final Certificate (SHFC) and issue the mineral patent. The processing of the SHFC follows a path similar to the FHFC. Approval of the SHFC constitutes award of the patent and legal title to the land is transferred to the applicant as of the date the Secretary signs the patent.

Until 1993, authority rested with BLM State Directors and District Managers to issue FHFCs, SHFCs and patents. That authority on temporarily revoked on March 3, 1993, and on December 16, 1996, the DOI Secretary permanently reserved his/her authority for signing both final certificate documents and for issuing patents.

Effective October 1, 1994, a Congressional moratorium was placed on the processing of mineral patent applications. The moratorium included in the Interior and Related Agencies Appropriations Act of 1994, contained two important provisions. Section 112 prohibited the obligation or expenditure of funds for the acceptance or processing of applications for patents for any mining claims or millsites under the Mining Law or the issuance of new patents for any mining claims or millsites. Section 113 is the "grandfather provision" that permits DOI to process those patent applications (1) filed on or before the date of enactment of the Act and (2) in full compliance with the statutory requirements under 30 U.S.C 29 and 309 for vein or lode claims. The moratorium has been extended each year through the end of FY 2002.

At the time of the Congressional moratorium in 1994, it was determined that 386 applications were "grand fathered" and 240 other pending applications were determined to fall within the moratorium. As of 2003, there are still 136 applications pending and 185 non-grandfathered applications that are not being processed.

In the simplest terms, mineral patents involves two significant steps: (1) reviewing the patent application to ensure that it is complete and in compliance with administrative requirements of the Mining Law and (2) performing a mineral validity examination to ensure that the geologic and economic evidence shows that the claimant has discovered a valuable mineral deposit. CMEs are responsible for conducting the most complex and controversial portion of this process, the mineral validity examination.

A mineral validity examination is the examination and evaluation of a mining claim(s) to determine if the mineral deposit claimed is commercially viable (valuable deposit under the General Mining Law). The process involves mapping the geology, sampling the deposit with regard to its geologic controls to confirm reserve estimates, determining the cost of mining the deposit, and determining the price to be received for the commodity produced. If the expected unit price to be received is greater than the estimated unit cost of production, the requirements for discovery under the General Mining Law have been satisfied. The essential test is that of the Prudent Man Rule - is there a reasonable prospect of success in developing a valuable mine?

Representatives from the Mineral, Realty, and Resource Protection Directorate (WO300) have stated that there is sufficient work to support 60-70 CMEs and 16-20 CRMEs. These numbers can fluctuate based upon workload, need and changes in law. The establishment of new CME positions requires prior approval of WO320. Certification as a CME is required prior to placement in the SPD. The SPDs require that the incumbent expend 40% of his/her worktime on CME or CRME related tasks.

Determination of Series and Title:

Dependent upon the duties and knowledge requirements the position will either be placed in the Geology Series, GS-1350, or Mining Engineering Series, GS-880. This position is designed for placement in the Geology Series, GS-1350.

Typical of the Geology Series, GS-1350, the position requires a professional knowledge of geology. To evaluate mining property, prepare mineral reports and serve as a Certified Mineral Examiner requires applying a knowledge of the principles and theories of geology and related sciences in the collection, measurement, analysis, evaluation, and interpretation of geologic information concerning the structure, composition, and history of the earth. Consequently the position is allocated to the GS-1350 Series and titled Geologist. The parenthetical '(CRME)' is assigned based on the specialized duties in the position description.

Determination of Grade:

It is determined that the state office geology duties of the position are not grade controlling or enhancing to the GS-13 level. Rather it is the duties/responsibilities related to the certified mineral examination work that support the higher grade. As such the CRME work will be evaluated.

The GS-1300P Job Family Standard (JFS) for Professional Physical Science Work is the most appropriate standard to use in determining the grade of this position. The GS-1300P includes appropriate language from the law and grade level criteria (standard) which is supplemented by illustrations of work appropriate for each grade level.

Evaluation:

The GS-13 level is the senior expert level, involving work for which technical problem definitions, methods, and/or data are highly incomplete, controversial, or uncertain. This level differs significantly from the GS-12 level in that evaluations and recommendations are accepted by others as those of a technical expert. Typically, scientists at this level represent an authoritative source of consultation for other scientists and program specialists and are called upon to perform a key role in resolving issues that significantly affect programs. They make long-range and controversial proposals and defend their findings and recommendations in public or high level forums.

Characteristically, GS-13 level employees represent their organizations or programs or the Government's interests, in some cases including representing the agency before public bodies on controversial projects. Included at this level are staff positions with responsibility for reviewing and coordinating field work in a narrow program area or reviewing and developing legislative or regulatory proposals.

Work related to being a Certified Review Minerals Examiner is best described by the GS-13 level. Like the GS-13 level the review work completed by the incumbent is accepted by others as those of a technical expert. The incumbent serves as a senior level expert in mineral

examination for the BLM. The incumbent has been designated by Headquarters as a Reviewer of mineral reports received from Bureaus within Interior, and the Forest Service and provides final technical review and clearance for mineral patent reports forwarded to the Secretary of the Interior for issuance of patent.

The GS-13 level of the standard includes several illustrations that discuss senior scientific representatives and project managers. One illustration considered to be reflective of the incumbent's mineral review work describes serving as a water-quality expert for an organization that is comparable to a single or multi-state water-resources program area or a small region in terms of size and complexity. Reviews project proposals involving extremely complex water quality problems and issues to determine the feasibility of the projects, based on agency or bureau programs or priorities, the adequacy of work plans, proposed technical approaches and methodology, and human and budgetary resources.

The incumbent's review and authority to approve mineral reports for the Bureau/Department is reflective of the above example. As part of small cadre of certified reviewers in the Bureau the incumbent conducts extensive and complex reviews of a variety of mineral reports. This review is the final technical review within the Department prior to a legal review by the DOI Solicitor's Office and decision by the Secretary.

Conclusion: It is determined the appropriate grade for this position is GS-13.

Classification: Since the primary duties and knowledge requirements in this position are related to geology, this position is classified as Geologist (CRME), GS-1350-13. In situations where the primary duties and knowledge requirements are related to mining engineering, position description number NS0052, or Mining Engineer (CRME), GS-880-13, should be utilized.

The position is EXEMPT - It meets the criteria of Professional as outlined in the standards on FLSA.

Todd W. Ryan
HR Specialist (Classification)